Committed to respect

The main standards involved in low voltage system are:

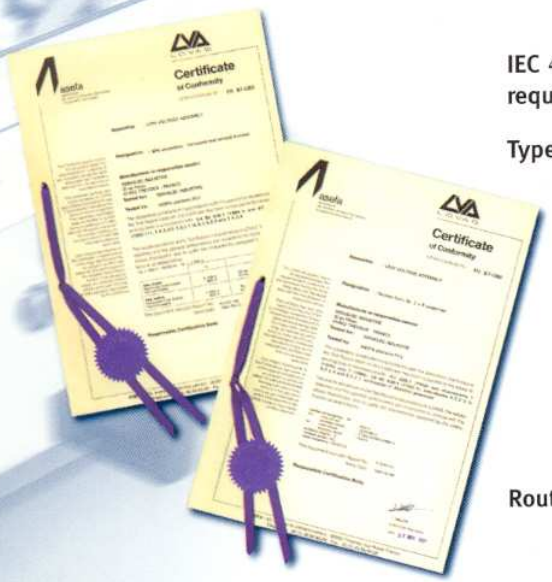
- Low-voltage switchgear and controlgear assemblies **IEC 439-1**
- Degrees of protection provided by enclosures **IEC 529**
- Apparatus **IEC 947 – IEC 269**
- Electrical installations of buildings **IEC 364**
- Corpus of rules and laws.

Summary of definitions

Functional unit: set of devices comprising all the mechanical and electrical elements that contribute to the fulfilment of the same function.

Type-tested assembly (TTA): a low-voltage swichtgear and controlgear assembly conforming to an established type or system without deviations likely to significantly influence the performance, from the typical ASSEMBLY verified to be in accordance with this standard.

Partially type-tested assembly (PTTA): a low-voltage swichtgear and controlgear assembly, containing both type-tested and non-type-tested arrangements provided that the latter are derived (e.g. by calculation) from type-tested arrangements which have complied with the relevant tests.



IEC 439-1 standard defines the seven test types and three routine tests required to verify compliance for a given type of ASSEMBLY.

Type tests

1. vérification of temperature-rise limits
2. vérification of dielectric properties
3. vérification of the short-circuit withstand strength
4. vérification of effectiveness of the protective circuit
5. vérification of clearances and creepage distances
6. vérification of mechanical operation
7. vérification of the degree of protection

Routine tests

1. inspection of the assembly and electrical operation test
2. dielectric test
3. checking of protective measures and of the electrical continuity of the protective circuits.